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**JAPAN** 

2 2007

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February 26, 2007

YOUR REF: SLA1347

OUR REF: SU102/358/EP SHARP REF: 04R00067/EP

Re: Partial European Search Report of European Patent Application No. 04023233.2 based on U.S. Patent Application No. 10/676,312

Dear Sirs.

Concerning the above identified EP application, we enclose a copy of a partial European Search Report issued on February 16, 2007, References and EP Attorney's letter of February 21, 2007.

PLEASE ACKNOWLEDGE RECEIPT OF THIS LETTER BY FACSIMILE.

Very truly yours, NAGISA PATENT OFFICE

# MÜLLER, HOFFMANN & PARTNER

The way was and and and and

## **PATENTANWÄLTE**

European Trademark Attorneys

**European Patent Attorneys** 

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Original follows via mail

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D-81667 München

European Patent Application No. 04 023 233.2 SHARP KABUSHIKI KAISHA Your Ref.: SU102/358EP

Our File: 56269

Dear Mr. Takano,

RECEIVED
FEB. 26. 2007
NAGISA
F.O.

21.02.2007 Mü/Ko/gu

Please find enclosed duplicate copies of an EPO Communication dated February 16, 2007 transmitting the Partial European Search Report under Rule 46(1) EPC.

We further enclose a LACK OF UNITY OF INVENTION Statement of the EPO indicating that the EPO Search Division considers that the application relates to nine groups of inventions, namely:

- a first invention referring to claims 1 to 37, 45 to 46 and 47 to 54;
- a second invention referring to claims 38 to 44;
- a third invention referring to claims 55 to 60, 61 to 63, 106 to 107 and 108 to 109;
- a fourth invention referring to claims 64 to 66 and 104 to 105;
- a fifth invention referring to claims 67 to 75, 76 to 78 and 102 to 103;
- a sixth invention referring to claims 79 to 87;
- a seventh invention referring to claims 88 to 91;
- an eighth invention referring to claims 92 to 93, 94 to 95 and 96 to 101; and
- a nineth invention referring to claims 110 to 111 and 112 to 113.

We further enclose a Patent Family Members List as well as two copies of each prior art document considered to be relevant by the Search Examiner. The documents have been evaluated for category "X".

In the enclosed EPO Communication, you will find the invitation to the Applicant to pay eight further search fees with respect to the above mentioned inventions.

As you might know, the non-payment of an additional search fee has no direct consequences at this time. However, if at a later time during examination the Primary Examiner should confirm the Lack of Unity of Invention Statement of the Search Examiner, it will no longer be possible to combine the claims of the further inventions with any of the claims of the first invention.

Of course, also at that time during examination it will be possible to argue in respect of unity of invention and/or to file one or several divisional applications.

The EPO has fixed a period of only one month for deciding whether or not an additional search fee should be paid. This period ends on

March 16, 2007.

If we do not receive any instructions from you at the latest by

March 9, 2007.

we will assume that no further additional search fee should be paid.

Please confirm safe receipt of this telefax letter.

Very truly yours,

Dieter Kottmann

#### Enclosures

- 2 x EPO Communication of February 16, 2007 with
  - EPO Partial Search Report
  - LACK OF UNITY OF INVENTION Statement
  - Abstract
  - Patent Family Members List
  - Prior Art Documents (by mail only)
- 1 x General Information

# GENERAL INFORMATION with Respect to EPO/DE-PTO Search Reports/Examination Reports

Prior art documents cited and enclosed with the Search Report/Examination Report of the European Patent Office (EPO) or German Patent and Trademark Office (DE-PTO) are sometimes incomplete or of poor quality. We transfer those documents to you as we receive them.

If you should realize missing parts of such documents, please inform us. However, please note that after filing a request with the EPO or the DE-PTO for sending us the complete or corrected documents, it takes several weeks until we receive an answer.

In special or urgent cases we can offer to order the missing parts of such documents for you via our own copy services in the EPO or DE-PTO, respectively. However, this will regularly cause extra cost.

MÜLLER · HOFFMANN & PARTNER

European Patent Office

Office européen des brevets



Müller - Hoffmann & Partner Patentanwälte, Innere Wiener Strasse 17

81667 München ALLEMAGNE

EINGEGANGEN MULLER • HOFFMANN & PARTINER 20. Feb. 2007

UT 02,03.076

EPO Customer Services Tel.: +31 (0)70 340 45 00

Date

16.02.07

Reference 56269 Mü/rs Application No./Patent No. 04023233.2 - 1228

Applicant/Proprietor

SHARP KABUSHIKI KAISHA

#### Communication

The European Patent Office herewith transmits the partial European search report under Rule 46(1) EPC relating to the above-mentioned European patent application.

Copies of the documents cited in the search report are enclosed.

The applicant's attention is drawn to the following:

The Search Division informs the applicant that if the European search report is also to cover inventions other than the invention first mentioned in the claims, a further search fee must be paid for each of these inventions, within one month after notification of this communication.

For applications with a filing date up to 30 June 1999, the amount payable for a search fee requested under Rule 46(1) EPC is EUR 869,— (OJ EPO 2006, 495). For applications with a filing date between 1 July 1999 and 30 June 2005, the amount payable for a search fee requested under Rule 46(1) EPC is EUR 690,— (OJ EPO 2006, 495).

- The abstract was modified by the Search Division and the definitive text is attached to the present communication.
- Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

#### Note to users of the automatic debiting procedure:

Unless the EPO receives prior instructions to the contrary, the search fee(s) will be debited on the last day of the period for payment. For further details see the Arrangements for the automatic debiting procedure, Supplement No.2 to Official Journal No.01/2005.





# PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 46, paragraph 1 of the European Patent EP  $\,$  04  $\,$  02  $\,$  3233 Convention

	DOCUMENTS CONSIDE			
ategory	Citation of document with in of relevant passa		Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
<b>(</b>	NAKANO D ET AL: "FAUSING FEED-BACKWARD IDW. PROCEEDINGS OF DISPLAY WORKSHOPS, ) 4 December 2002 (200211-214, XP009049491* page 212, last parparagraph 3; figure	OVERDRIVE TECHNOLOGY" THE INTERNATIONAL (X, XX, )2-12-04), pages tagraph - page 213,	1-37, 45-54	INV. G09G3/36
<b>(</b>	to digital hd lc-tvs IDW. PROCEEDINGS OF DISPLAY WORKSHOPS, X 4 December 2002 (200 323-326, XP009049492	echnology applicable "THE INTERNATIONAL XX, XX, 12-12-04), pages	1-37, 45-54	
	AL) 27 March 2003 (2	 AKAKO ADACHI [JP] ET 003-03-27) - [0116]; figure 4b *	1-37, 45-54	TECHNICAL FIELDS SEARCHED (IPC) G09G
ACK	OF UNITY OF INVENTION	OAI		
The Searc	ch Division considers that the present E	uropean patent application does not compl to severalinventions or groups of invention	y wilh is,	
see	sheet B			:
he prese	nt partial European search report has b	een drawn up forthose parts of the Europe	ean	
ment abb	plication which relate to the invention fin	St mentioned in the claims,  Date of completion of the search		Examiner
	The Hague	7 February 2007	Δmi	
X : partie Y : partie	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with another ment of the same category	T: theory or princip E: earlier patient do	le underlying the li current, but publis	an, Dirk  nivention shed on, or

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### LACK OF UNITY OF INVENTION SHEET B

Application Number EP 04 02 3233

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-37, 45-46, 47-54

feedback overdrive using predicted displayed luminance value

2. claims: 38-44

feedback overdrive using previous capacitance value

3. claims: 55-60, 61-63, 106-107, 108-109

overdriving based on plural images using a non-recursive circuit

4. claims: 64-66, 104-105

overdriving based on luminance value yet to be displayed

5. claims: 67-75, 76-78, 102-103

overdriving in dependence of image content or image information

6. claims: 79-87

overdriving using two lookup-tables of different size and dimensions

7. claims: 88-91

overdriving using two functions of different order

8. claims: 92-93, 94-95, 96-101

content of buffer modified in dependence of the fact whether a pixel was overdriven or not

9. claims: 110-111, 112-113

overdriving using voltages higher/lower than maximum/minimum gray scale

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

CÎ	Patent document ted in search report		Publication date		Patent family member(s)	Publication date
บร	2003058264	A1	27-03-2003	JP KR	2003172915 20030027738	20-06-2003 07-04-2003
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# ABSTRACT / ZUSAMMENFASSUNG / ABREGE

04023233.2

Processing of images for displaying images on a liquid crystal display with improved luminance.

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